



# SOUTHEAST GAP ANALYSIS PROJECT



## Species Modeling Report

### Red Crossbill

*Loxia curvirostra*

Taxa: Avian

Order: Passeriformes

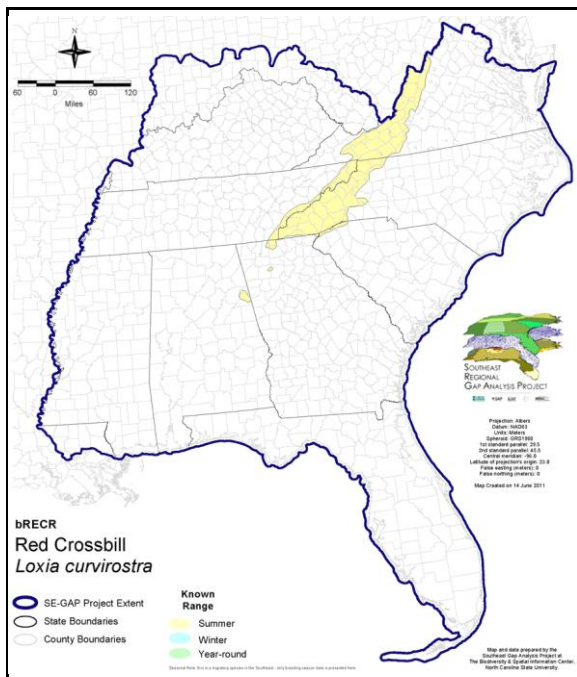
Family: Fringillidae

SE-GAP Spp Code: **bRECR**

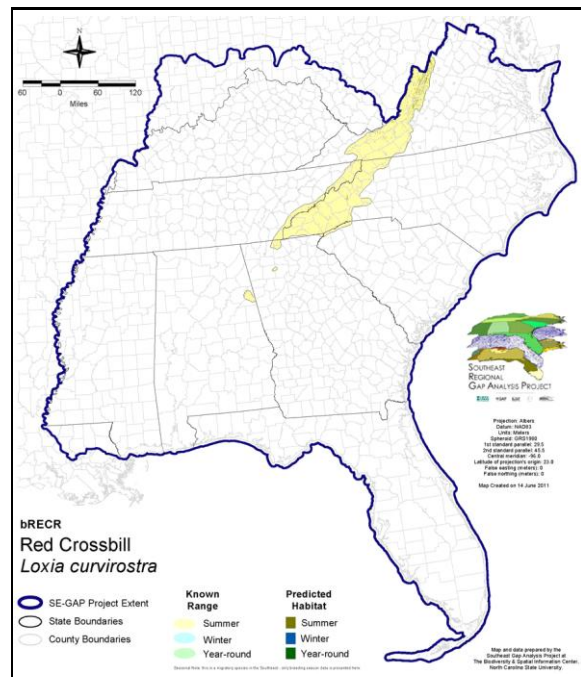
ITIS Species Code: 179259

NatureServe Element Code: ABPBY05010

#### KNOWN RANGE:



#### PREDICTED HABITAT:



Range Map Link: [http://www.basic.ncsu.edu/segap/datazip/maps/SE\\_Range\\_bRECR.pdf](http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_bRECR.pdf)

Predicted Habitat Map Link: [http://www.basic.ncsu.edu/segap/datazip/maps/SE\\_Dist\\_bRECR.pdf](http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_bRECR.pdf)

GAP Online Tool Link: <http://www.gapservice.ncsu.edu/segap/segap/index2.php?species=bRECR>

Data Download: [http://www.basic.ncsu.edu/segap/datazip/region/vert/bRECR\\_se00.zip](http://www.basic.ncsu.edu/segap/datazip/region/vert/bRECR_se00.zip)

#### PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: AR (W\*), ID (P), KY (N), NJ (S), NV (YES), NY (PB), RI (Not Listed), UT (None), VA (SC), VA (SC), WI (SC/M), WI (SC/M), BC (4 (2005)), NF (Endangered), QC (Non suivie)

NS Global Rank: G5

NS State Rank: AK (S4), AL (S1B), AR (S3N), AZ (S4), CA (SNR), CO (S5), CT (SNA), DC (S1N), DE (SNA), GA (SU), IA (S2N), IA (S2N), ID (S5), IL (S1), IN (S1N), IN (S1N), KS (SNA), KY (SNA), LA (SNA), MA (S1B,S4N), MD (SNA), ME (S3S4B,S3S4N), MI (S3), MN (SNRB,SNRN), MO (SNA), MS (SNA), MT (S5), NC (S3B,S3N), ND (SNA), NE (S4), NH (SNA), NJ (SNA), NM (S4B,S4N), NV (S5), NY (S3), OH (SNRN), OK (S1N), OR (S4), PA (SNA), RI (SNA), SC (S4), SD (S4B,S3N), TN (S1B,S2N), TX (S3), UT (S2S3), VA (S1), VA (S1), VT (S1S2B,S3N), WA (S4B), WA (S4B), WI (S2?B), WI (S2?B), WV (S2N), WY (S5B,S5N), AB (S4), BC (S4S5B), LB (SNA), MB (S3), NB (S2S3), NF (S2S3), NS (S3S4), NT (SNR), ON (S4B), PE (S2S3), QC (S4B), SK (S4B,S5N), YT (S5B)

**SUMMARY OF PREDICTED HABITAT BY MANAGMENT AND GAP PROTECTION STATUS:**

	US FWS		US Forest Service		Tenn. Valley Author.		US DOD/ACOE	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	1,107.3	< 1	0.0	0	0.0	0
Status 2	0.0	0	17,076.7	9	0.0	0	0.0	0
Status 3	0.0	0	40,914.7	22	0.0	0	77.0	< 1
Status 4	1.7	< 1	0.0	0	0.0	0	0.0	0
Total	1.7	< 1	59,098.7	32	0.0	0	77.0	< 1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	12,227.2	7	0.0	0	0.0	0
Status 2	0.0	0	0.0	0	0.0	0	0.0	0
Status 3	0.0	0	858.9	< 1	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	13,086.1	7	0.0	0	0.0	0
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	0.0	0	0.0	0
Status 2	0.0	0	37.5	< 1	2,878.9	2	0.0	0
Status 3	118.4	< 1	694.6	< 1	27.0	< 1	149.5	< 1
Status 4	0.0	0	0.0	0	0.3	< 1	0.0	0
Total	118.4	< 1	732.2	< 1	2,906.2	2	149.5	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	0.0	0	0.0	0
Status 2	0.0	0	145.5	< 1	0.0	0	0.0	0
Status 3	0.0	0	0.0	0	0.7	< 1	0.0	0
Status 4	0.0	0	0.0	0	0.5	< 1	0.0	0
Total	0.0	0	145.5	< 1	1.3	< 1	0.0	0
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	13,334.5 7			
Status 2	0.0	0	0.0	0	20,138.7 11			
Status 3	0.0	0	0.0	0	42,840.8 46			
Status 4	64,985.9	36	4.1	< 1	64,991.0 36			
Total	64,985.9	36	4.1	< 1	141,305.0 100			

GAP Status 1: An area having permanent protection from conversion of natural land cover and a mandated management plan in operation to maintain a natural state within which disturbance events (of natural type, frequency, and intensity) are allowed to proceed without interference or are mimicked through management.

GAP Status 2: An area having permanent protection from conversion of natural land cover and a mandated management plan in operation to maintain a primarily natural state, but which may receive use or management practices that degrade the quality of existing natural communities.

GAP Status 3: An area having permanent protection from conversion of natural land cover for the majority of the area, but subject to extractive uses of either a broad, low-intensity type or localized intense type. It also confers protection to federally listed endangered and threatened species throughout the area.

GAP Status 4: Lack of irrevocable easement or mandate to prevent conversion of natural habitat types to anthropogenic habitat types. Allows for intensive use throughout the tract. Also includes those tracts for which the existence of such restrictions or sufficient information to establish a higher status is unknown.

## PREDICTED HABITAT MODEL(S):

### Summer Model:

Habitat Description: Breeds primarily in coniferous forests (Adkisson 1996), although Ehrlich et al (1988) states crossbills will also breed in mixed forests. Kaufman (1996) lists the 'timing and distribution of nesting as quite irregular,' with breeding often occurring when 'cone crops are best.' Nest are hidden well in dense foliage on lateral branches, near or away from the trunk (Adkisson 1996). Forages on the cones of conifers including, spruce, pine, fir, and hemlock (Adkisson 1996). Foraging occurs in the canopy of conifers, primarily near the cones, where the conifer seeds are retrieved and insects are gleaned (Hamel 1992). Crossbills will also eat buds of various trees, deciduous and weed seeds, and berries (Kaufman 1996).

- K.Cook 5-28-05

Customized Model: Added elevation limits of 800m minimum per ALS review comments from website: [http://zipcodezoo.com/Animals/L/Loxia\\_curvirostra.asp](http://zipcodezoo.com/Animals/L/Loxia_curvirostra.asp). Simpson (1992) for Blue Ridge mts. states "prefers coniferous above 3000 ft."

Limit elevation only in Blue Ridge portion of the range. MJR 13 June 2007.

Elevation Mask: > 800m and < 2500m

### Selected Map Units:

Functional Group	Map Unit Name
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Pine Modifier
Forest/Woodland	Central and Southern Appalachian Spruce-Fir Forest
Forest/Woodland	Central Appalachian Oak and Pine Forest
Forest/Woodland	Central Appalachian Pine-Oak Rocky Woodland
Forest/Woodland	East Gulf Coastal Plain Northern Dry Upland Hardwood Forest - Offsite Pine Modifier
Forest/Woodland	Northeastern Interior Dry Oak Forest - Mixed Modifier
Forest/Woodland	Northeastern Interior Dry Oak Forest - Virginia/Pitch Pine Modifier
Forest/Woodland	Southern Appalachian Low Mountain Pine Forest
Forest/Woodland	Southern Appalachian Montane Pine Forest and Woodland
Forest/Woodland	Southern Piedmont Dry Oak-(Pine) Forest - Mixed Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Mixed Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Virginia/Pitch Pine Modifier
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Pine Modifier

**CITATIONS:** Adkisson, C. S. 1996. Red crossbill. In Poole A. and F. Gill., eds. The birds of North America. No. 256.

Ehrlich, P.R., D.S. Dobkin, and D. Wheye. 1988. The birder's handbook: a field guide to the natural history of North American birds. Simon and Shuster, Inc., New York. xxx + 785 pp.

Hamel, P. B. 1992. The land manager's guide to the birds of the south. The Nature Conservancy, Chapel Hill, North Carolina. 367 pp + several appendices.

Kaufman K. 1996. Lives of North American Birds. Boston, New York: Houghton Mifflin Company.

Potter, E. F., J. F. Parnell, and R. P. Teulings. 1980. Birds of the Carolinas. Univ. North Carolina Press, Chapel Hill. 408 pp.

Simpson MB Jr. 1992. Birds of the Blue Ridge Mountains. Chapel Hill and London: University of North Carolina Press.

Terres, J.K. 1980. The Audubon Society encyclopedia of North American birds. Alfred A. Knopf, New York.

For more information:: SE-GAP Analysis Project / BaSIC  
127 David Clark Labs  
Dept. of Biology, NCSU  
Raleigh, NC 27695-7617  
(919) 513-2853  
[www.basic.ncsu.edu/segap](http://www.basic.ncsu.edu/segap)

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This data was compiled and/or developed by the Southeast GAP Analysis Project at The Biodiversity and Spatial Information Center, North Carolina State University.